

Acreage Living

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Prairie Establishment

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Establishment of native prairie vegetation can be fairly simple -- as long as some basic rules are followed and the weather cooperates a little. The important things to plan for are site preparation, seeding time, seeding method, weed control, and patience!

Site Preparation

To get good native grass and forb establishment, it is important to eliminate all of the competing vegetation. If corn or soybean ground will be seeded down, this is usually not a problem. However, good weed control the previous year will minimize annual weed competition during establishment.

For existing cool season grass in CRP or pasture, the perennial grass must be killed before seeding. Either tillage, such as plowing and disking, or using a herbicide, such as Roundup, works well. Fall is the ideal time to get a good kill on the grass and this allows a greater flexibility of seeding time.

Seeding Time

Native species have been successfully seeded in the late fall, using late winter frost seedings, and in the spring. While all times have worked, there are some pluses and minuses with each one.

A late fall or dormant seeding after mid-November works well for establishing a mix of grasses and forbs. This allows the seeds to go through cold and wet conditions, or stratification, which enhances their germination. A late fall seeding tends to favor forbs over warm season grasses in establishing a diverse stand. By seeding after mid-November, the seed should not germinate before spring. The main disadvantage of fall seeding is that seedbed preparation must be complete and tillage cannot be used in the spring to eliminate flushes of weeds.

A good method of seeding switchgrass and other small, smooth seeds is frost seeding in February to mid March. This allows the seed to work down into firm contact with the soil, have moisture to germinate, and time for seed stratification. With small, smooth seeds like switchgrass, frost seeding over the top of crop residues or killed cool season grass has worked well. The seed is fine enough to work down through the surface residue and get in contact with the soil.

Spring seeding can also be successful. Anytime from when the ground is first fit, up through mid June, have proven successful. Unless forb seed has been stratified, spring seeding will tend to favor the

warm season grasses over the forbs. Stratification can be done by placing the forb seed in moist sand and keeping it under 40 degrees for several months. An advantage of a later spring seeding is to allow the use of tillage or herbicides to kill flushes of weeds. The disadvantage is the possibility of the weather turning dry and having limited moisture for seedling establishment.

Seeding Method

A challenge in seeding many native species is that the light and fluffy seeds won't flow through most conventional drills or seeders. This is true of most of the native grasses except for switchgrass. Forb seeds range from light and feathery to a very fine sand size. Native grass drills are available to handle the light, fluffy seed. They are specially equipped with large drop tubes and seed box agitators to keep the seed flowing. Some native grass drills can plant no-till through crop residues and others need to have the ground tilled up. While they do an excellent job, not everyone has access to one.

For small areas of a few acres or less, seed can be hand spread. For larger areas, using a broadcast spreader and blending the seed with cracked corn, oats, or other bulking agents has worked reasonably well. These materials can keep the seed flowing through the spreader. One thing to keep in mind is that the fluffy native grass seed will only be spread 3-5 ft. from the spreader. Don't be deceived by how far the denser bulking agent is being spread.

With any of the seeding methods, it is important not to get the seed placed too deep. Seed should only be about 1/4 inch deep with some of the seed still left on top. Broadcast seed that is very lightly harrowed in or just pressed in with a roller works just fine. Having a very firm seedbed is important. This allows moisture to "wick up" to the seed through capillary action to provide it with moisture as it starts to grow. Even when using a drill, it is a good idea to go over the ground with a roller to firm in the seed. Packing the seedbed is especially important with spring seeding as there is less chance for rainfall to settle the soil in around the seed.

Weed Control

Because warm season native species are slow to germinate and do not have a lot of top growth in the first season, keeping control of weeds is important. In fact, lack of weed control may be the number one reason for poor results with prairie seedings. Competition with the prairie seedlings for sunlight is the main problem with weeds. Thus, frequent mowing during the first growing season is important to keep annual weeds from shading the native plants.

Different mowing prescriptions have been given. They include: "mow early and mow often," "mow June 1, July 1, and August 1," and "mow whenever the weeds are 6 inches ahead of the prairie plants." All of these are good advice. The important thing is to DO IT. Recommended mowing height is about 6-10 inches. If frequent mowing is done, one can start at 4-6 inches and move up about 2 inches with each subsequent mowing. With any mowing, it is important to mow before you are laying down a mat of material that could smother the native plants.

There are a couple of herbicides labeled for weed control in native seedings. Atrazine can be used on CRP land with switchgrass and big bluestem. Plateau is a relatively new herbicide labeled for use on prairie seedings. Many native grasses and a number of forbs are tolerant to it. Read the label carefully as switchgrass may be injured and not all forbs are tolerant. Plateau has shown good control of annual grass and broadleaf weeds. Depending on the species in your seeding, it may be of benefit.

No fertilization should be done on native plantings. In most cases, any fertilizer benefits the annual weeds more than it does the native species.

Patience

This is the toughest part. During the first year, the prairie seeding may not look like much more than a weed patch. Most native plants put most of their growth into their root system the first year. Also, many of us are not great at identifying native plant seedlings. In late summer, have someone with native prairie experience look at the seeding with you.

They can help evaluate seeding success and show you what different species look like. In the second and third year you should start to see the native species come shining through.

For more information on prairie establishment and maintenance, contact your local Natural Resources Conservation Service or visit the Iowa Prairie Network web site at <http://www.iowaPrairieNetwork.org/>

Country Living No Escape From Crime

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Country living may offer wonderful sunsets, song-birds, and a different pace, but don't be lulled into a false sense of security.

Property crime in rural areas has been increasing over the years. You can't afford to be complacent just because you live in the country. A lack of security can only lead to trouble if you live in the country or on a farm.

U.S. Department of Justice data for 1997 shows that rural Iowa had more than 8,600 reported cases of crimes against property, which includes burglary, larceny theft, and motor vehicle theft. Rural communities have unique crime problems, such as theft of crops, timber, livestock, or expensive farm equipment. Unlike days gone by, vandals do more than break mailboxes; they can be part of a larger, more organized network of thieves, or be part of a growing drug manufacture and trade.

Sharon Rogers, Iowa Crime Prevention Association, says many people move to rural areas to escape crime. The problem arises when criminals also move their activities out of major metropolitan areas to escape the scrutiny of law enforcement personnel. This isn't limited to property crimes; we are seeing major problems with methamphetamine production in rural areas.

Following are several security tips developed by the Iowa Crime Prevention Association:

- Make sure outside doors in your home and

outbuildings are solid wood or metal and have deadbolt locks, and use the locks!

- Keep your house, driveway, barns, and other buildings well lighted at night using timers. Consider motion sensors that set off lights or alarms. Keep fences in good repair and secure access roads with gates or cables stretched between posts. "No Trespassing" and "No Hunting" signs warn thieves that you're on the alert.
- Secure gas pumps, gas tanks, storage bins, and grain elevators with sturdy padlocks or deadbolts. Keep small equipment (mowers, bikes, snowmobiles) locked in a barn or garage. Never leave keys in vehicles or farm equipment, or large equipment in a field overnight.
- Contact your local law enforcement agency about Operation Identification, an organized way to mark tools, guns, and equipment with a permanent identification number.
- Be a good neighbor. Neighborhood Watch groups can help reduce crime in rural areas, too.

For more information, contact your county ISU Extension office or local sheriff. The Iowa Crime Prevention Association operates a resource center in Merle Hay Mall in Des Moines and staffs a toll-free hotline, 1-800-355-IOWA. Web sites with information on rural crime include the National Crime Prevention Council at <http://www.ncpc.org/> and the National Center on Rural Justice & Crime Prevention at Clemson University <http://virtual.clemson.edu/groups/ncrj/rcrime.htm>

Spend a Day...Save a Life?

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Saving a life by spending one day may seem like an unbelievable return on the investment. But one southwest Iowa farmer thinks he got that return. Dick was working with a bull that had been giving the farm trouble and was scheduled to be sold. As he tried to move the bull to a different holding pen, the bull turned on him and pinned him to the ground. Every time Dick tried to get up, the bull would pin him down again with his massive head and feet. Badly beaten and bleeding, Dick was in a life-threatening situation. One of Dick's daughters came to the rescue. Recalling information she had learned at a farm safety day camp, she advised her father to hold still while she distracted the bull from safely outside the pen. After seeing her father crawl to safety, she called for assistance. Dick credits the knowledgeable and cool-headed advice from his daughter for saving his life.

While a farm is a great place to live and raise a family, it is also a place filled with hidden dangers. Statistics show that farming is the most hazardous occupation in the country. But help is available. Every year, hundreds of farm safety camps are held around the country. In Iowa, nearly half of the counties host a farm safety day camp each year. These events are generally 4-6 hours long and expose participating youth to fun and educational sessions on many different safety topics. A participant may learn how to recognize animal warning signs, safety rules for ATVs, what makes farm tractors tip over, or how to safely operate a lawn mower. They may learn how to apply a splint, see how a tractor PTO can grab loose clothing, or tour the inside of an ambulance.

Farm safety camps are a great way for kids to have fun, make friends, and learn how to avoid dangers on the farm, all at the same time. To find out more about the availability of farm safety camps in your community, contact your local ISU Extension office. Many of these events are co-sponsored by Progressive Farmer with financial support from a number of concerned businesses. You can find a list of sponsored safety camps at the Progressive Farmer web site, <http://www.progressivefarmer.com/safety/list.asp>. A number of farm safety bulletins and resources are available from your county ISU Extension office, including a new family workbook titled "What Would You Do?" This book helps families with young children discuss safety issues using illustrated real-life situations.

Lingo Lexicon:

(brief definitions of current environmental jargon)

Impaired Waters - Streams, lakes, reservoirs and wetlands that do not fully support the water quality needed for swimming, fishing, or drinking. A water body can be "impaired" by pollution from silt, nutrients, chemicals, or disease organisms. These impaired waters are placed on a list for attention called the Section 303(d) list. Iowa currently has 157 water bodies on this list. For more information about Iowa's impaired waters, visit the Department of Natural Resources web site at <http://www.state.ia.us/dnr/organiza/epd/wtresrce/303dnorc.htm> or call the program coordinator at 515-281-8143.

Acreage Living is published monthly. For more information, contact your local county ISU Extension office.

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